

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-25 (cancelled).

26 (previously presented). A method of introducing an oil field or gas field production chemical into a hydrocarbon-bearing porous subterranean formation penetrated by a wellbore comprising:

injecting a gelling composition comprising an aqueous liquid, an oil field or gas field production chemical, and a gellable polymer through the wellbore into the porous subterranean formation wherein the gellable polymer forms a gel within the pores of the subterranean formation thereby encapsulating the production chemical in the gel; and controllably releasing the production chemical from the gel into a formation fluid.

27 (previously presented). A method of increasing the effectiveness of an oil or gas field production chemical by reducing the number of squeezing and shut-in operations needed to increase the production rate from a wellbore penetrating a hydrocarbon-bearing porous subterranean formation, said method comprising:

A) injecting a gelling composition comprising an aqueous liquid, an oil or gas field production chemical and a gellable polymer through the wellbore into the porous subterranean formation wherein the polymer forms a gel in the formation thereby encapsulating the oil or gas field production chemical in the gel;

B) after injecting the gelling composition, optionally over-flushing the porous subterranean formation with an aqueous fluid or an oil;

C) subsequently, shutting-in the well for a period of time; and

D) putting the well back on production and controllably releasing the oil or gas field production chemical from the gel into a formation fluid that is being produced from the well.

28 (previously presented). A method as claimed in claim 26 wherein the gelling composition comprises (i) an aqueous liquid, (ii) an oil or gas field production chemical, (iii) a gellable polymer having crosslinkable groups, and (iv) a crosslinking agent and wherein the gel is formed within the pores of formation through crosslinking of the crosslinkable groups of the gellable polymer with the crosslinking agent.

29 (previously presented). A method as claimed in claim 26 wherein the production chemical is controllably released from the gel into the formation fluid in the near wellbore region of the formation.

30 (previously presented). A method as claimed in claim 26 wherein the formation fluid is selected from the group consisting of a formation brine, crude oil, natural gas and gas field condensate.

31 (previously presented). A method of introducing an oil field or gas field production chemical into a hydrocarbon-bearing porous subterranean formation penetrated by a wellbore comprising:

forming a polymer slug by dispersing or dissolving a gellable polymer in a first aqueous fluid;

forming a crosslinking agent slug by dissolving a crosslinking agent in a second aqueous fluid;

dispersing, suspending or dissolving a production chemical in the polymer slug and/or the crosslinking agent slug;

forming a gelling composition within the pores of the formation by either: (a) injecting the polymer slug into the porous subterranean formation prior to injecting the crosslinking agent slug and back-producing the polymer slug over the crosslinking agent slug or (b) injecting the crosslinking agent slug into the porous subterranean formation prior to injecting the polymer slug and back-producing the crosslinking agent slug over the polymer slug.

32 (previously presented). A method as claimed in claim 31 wherein an aqueous spacer is injected between the polymer slug and crosslinking agent slug and optionally an aqueous pre-flush fluid is injected into the porous subterranean formation prior to injection of the polymer slug, crosslinking slug and aqueous spacer.

33 (previously presented). A method as claimed in claim 31 wherein the production chemical is dissolved, dispersed or suspended in one or more of the

aqueous pre-flush fluid, the polymer slug, the crosslinking agent slug or aqueous spacer.

34 (previously presented). A method as claimed in claim 26 wherein the oil or gas field production chemical is selected from the group consisting of (i) scale inhibitors, (ii) corrosion inhibitors, (iii) hydrogen sulphide scavengers and (iv) hydrate inhibitors.

35 (previously presented). A method as claimed in claim 26 wherein the production chemical is suspended in the aqueous liquid in the form of particles having a particle size of 100% less than 10 microns.

36 (previously presented). A method as claimed in claim 35 wherein the particles of production chemical are coated with a coating agent selected from water-soluble polymers and oil-soluble polymers.

37 (previously presented). A method as claimed in claim 26 wherein the gellable polymer is selected from the group consisting of biopolysaccharides, cellulose ethers and acrylamide-containing polymers.

38 (previously presented). A method as claimed in claim 26 wherein the concentration of the gellable polymer in the gelling composition is in the range of about 0.01 to 0.5 weight percent.

39 (previously presented). A method as claimed in claim 26 wherein the gelling composition additionally comprises a buffering agent having a buffering capacity at a pH of up to about 5.5.

40 (previously presented). A method as claimed in claim 39 wherein the buffering agent is present in the gelling composition at a concentration in the range 0.001 to 10% by weight based on the weight of the gelling composition.

41 (previously presented). A method as claimed in claim 28 wherein the cross-linking agent is a polyvalent metal compound selected from the group consisting of polyvalent compounds of zirconium titanium, aluminum, iron, chromium, hafnium, niobium and antimony.

42 (previously presented). A method as claimed in claim 41 wherein the concentration of crosslinking agent in the gelling composition is from 0.001 to 0.5 weight percent based on the concentration of the polyvalent metal.

43 (previously presented). A method as claimed in claim 27 wherein the well is shut-in for a period of up to 50 hours before putting the well back on production.

44 (previously presented). A method as claimed in claim 26 wherein the amount of production chemical in the gelling composition is in the range from 1-25% by weight.

45 (previously presented). A method as claimed in claim 26 wherein the production chemical is released into the formation fluid through thermal and/or biodegradation of the gel under the conditions encountered in the formation.

46 (previously presented). A method as claimed in claim 45 wherein the gel starts to thermally degrade at a temperature in the range 50 to 150°C.

47 (previously presented). A method as claimed in claim 26 wherein the gelling composition contains an effective amount of a gel breaker so as to provide controlled breaking of the gel.

48 (previously presented). A method as claimed in claim 47 wherein the gelling composition comprises from 0.1 to about 10 wt% of gel breaker.

49-63 (canceled).